

Mitchell County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/28/2017

Using the most recent IMPLAN data available (2015) adjusted for 2017, 17 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Mitchell County economy.¹

These 17 sectors have a total direct output of approximately **\$355.8 million** and support **1,228.0 jobs** in Mitchell County. Running the model for all 17 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Mitchell County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	1,228.0	24.12%	\$78,126,419	25.63%	\$355,829,290	116.74%
Indirect Effect	401.6	7.89%	\$35,695,571	11.71%	\$62,571,376	20.53%
Induced Effect	260.1	5.11%	\$15,626,082	5.13%	\$28,580,161	9.38%
Total Effect	1,889.7	37.12%	\$129,448,071	42.47%	\$446,980,827	146.65%

As shown in the above table, agriculture, food, and food processing sectors support **1,889.7 jobs**, or **37.12%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$447.0 million**, roughly **146.65% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 17 agriculture, food, and food processing sectors is approximately **\$129.4 million**, or **42.47% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **42.47% of the total economy**.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the commercial hunting and trapping sector is the top employer with **386.0 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Mitchell County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Commercial hunting and trapping	386.0	\$17,328,856
Farm machinery and equipment manufacturing	325.3	\$179,564,022
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	280.9	\$52,305,232
Wholesale trade	133.1	\$29,174,527
Grain farming	104.1	\$55,630,609
All other crop farming	51.4	\$5,708,217
Monetary authorities and depository credit intermediation	36.7	\$5,939,576
Truck transportation	36.4	\$6,100,197
Real estate	32.1	\$3,914,469
Support activities for agriculture and forestry	28.7	\$6,213,281

The farm machinery and equipment manufacturing sector directly contributes approximately **\$179.6 million** to the Mitchell County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Farm machinery and equipment manufacturing	325.3	\$179,564,022
Grain farming	104.1	\$55,630,609
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	280.9	\$52,305,232
Wholesale trade	133.1	\$29,174,527
Other animal food manufacturing	15.0	\$20,782,954
Commercial hunting and trapping	386.0	\$17,328,856
Oilseed farming	8.9	\$15,132,764
Owner-occupied dwellings	0.0	\$6,312,263
Support activities for agriculture and forestry	28.7	\$6,213,281
Truck transportation	36.4	\$6,100,197

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Mitchell County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	8.9	\$15,132,763.86
Grain farming	104.1	\$55,630,607.60
Fruit farming	0.6	\$43,839.40
Tree nut farming	0.0	\$4.33
Greenhouse, nursery, and floriculture production	4.1	\$485,480.49
All other crop farming	51.4	\$5,708,216.67
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	280.9	\$52,305,229.19
Poultry and egg production	5.1	\$3,992,062.57
Animal production, except cattle and poultry and eggs	8.7	\$1,481,708.29
Commercial hunting and trapping	386.0	\$17,328,857.42
Other animal food manufacturing	15.0	\$20,782,953.26
Meat processed from carcasses	1.7	\$881,059.59
Bread and bakery product, except frozen, manufacturing	5.4	\$626,686.99
Frozen cakes and other pastries manufacturing	0.3	\$49,032.02
Farm machinery and equipment manufacturing	325.3	\$179,564,025.88
Veterinary services	14.3	\$1,368,219.26
Landscape and horticultural services	16.3	\$448,543.34

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Mitchell County, the retail sector was omitted.